ELATION

VENTED GAS FIREPLACE INSERT

(4 LOG STYLE)

INSTALLATION AND OPERATING INSTRUCTIONS

WARNING: IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE INJURY OR PROPERTY DAMAGE. REFER TO THIS MANUAL. FOR ASSISTANCE OR ADDITIONAL INFORMATION, CONSULT A QUALIFIED INSTALLER, SERVICE AGENCY, OR THE GAS SUPPLIER.

FOR YOUR SAFETY

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPOURS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

FOR YOUR SAFETY

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any electrical appliance
- Do not touch any electrical switch
- Do not use any phone in your building
- Immediately call your gas supplier from a neighbour's phone
- Follow the gas supplier's instruction
- If you cannot reach your gas supplier, call the fire department

Manufactured by:

DROLET STOVES & FIREPLACES INC.

1700 Leon-Harmel Quebec, QC G1N 4R9 Canada Tested by: Intertek Testing Services



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GENERAL INFORMATION

The **ELATION** fireplace insert is a high-efficiency free-standing gas appliance with a maximum input rating of 25,000 Btu/h (7.3 kWh) with natural gas or 25,000 Btu/h (7.3 kWh) with propane. It features an adjustable millivolt valve and a constant pilot. This means that you can set the height of the flame with a control knob or with an optional remote control. An optional wall thermostat is also available for automatic room temperature control. The valve is also independent of any exterior electrical supply. Your appliance will therefore continue to heat your house in the event of a power failure.

For increased efficiency, we have included a 130 CFM (3.68 m³/min) blower with speed control and thermo-switch. Your blower will therefore turn itself on or off automatically if you desire.

Read these instructions and consult local building authorities before installing this appliance. Install the unit and its venting system only as directed in these instructions.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

This fireplace insert has been tested by Intertek Testing Services in accordance with CAN1-2.1-M86, ANSI Z21.11.1 1991, Z21.11.1a 1993, Z21.11.1b-1996, ANSI Z21.50-1996/CGA-2.22-M96.

WARNING

INSTALLATION SHOULD BE DONE BY A QUALIFIED INSTALLER.

DO NOT BURN WOOD OR ANY OTHER MATERIAL IN THIS APPLIANCE.

HOT WHEN IN OPERATION. KEEP CHILDREN, FURNITURE, CLOTHING AND FLAMMABLE MATERIAL AWAY FROM THE APPLIANCE.

ADVISE ADULTS AND CHILDREN ABOUT THE HAZARD OF HIGH SURFACE TEMPERATURES AND THAT THEY SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION.

YOUNG CHILDREN SHOULD BE SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.

THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND AT LEAST ANNUALLY BY A QUALIFIED SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIAL, ETC.

IT IS IMPERATIVE THAT THE CONTROL COMPARTMENTS, BURNERS AND CIRCULATING AIR PASSAGEWAYS BE KEPT CLEAN.

DO NOT MODIFY THIS APPLIANCE.

THE OPENINGS IN THE FIREPLACE INSERT SHOULD NEVER BE BLOCKED.

PROVIDE ADEQUATE ACCESSIBILITY CLEARANCES FOR SERVICING AND PROPER OPERATION.

SPECIFICATIONS

Dimensions:

height: 20" (508 mm)

width: front: 28" (711 mm) rear: 16" (406 mm)

depth: 14 3/4" (375 mm)

Surround dimensions: Small Large

width: 40" (1016 mm) 44" (1118 mm) height: 25 ½" (648 mm) 27 ½" (699 mm)

Glass: 5mm 28" (711 mm) x 11 1/4" (286 mm) 1400° F clear ceramic

<u>Fuel:</u>	Natural Gas	<u>Propane</u>	
Maximum input:	25,000 (7.3)	25,000 (7.3)	Btu/h (kWh)
Minimum input:	17,000 (5.0)	19,000 (5.6)	Btu/h (kWh)
Manifold pressure:	3.5/1.8 (0.9/0.5)	10.5/7.0 (2.6/1.8)	in w.c. (kPa)
Min. inlet pressure:	5 (1.3)	11 (2.8)	in w.c. (kPa)
Max. inlet pressure:	8 (1.8)	14 (3.5)	in w.c. (kPa)
Orifice size/Altitude:	42 dms 0-4500 ft	53 dms 0-4500 ft	
Output capacity (Blower off)	:18,500 (5.4)	18,500 (5.4)	Btu/h (kWh)
Output capacity (Blower on)	: 20,000 (5.9)	20,000 (5.9)	Btu/h (kWh)
Efficiency (Blower off):	73.5%	73.5%	
Efficiency (Blower on):	80.6%	80.6%	

Vent: 4" "B-vent", "L-vent" or certified flex liner

Valve: SIT model Nova 820 adjustable millivolt valve

Blower: variable speed, 130 CFM (3.68 m³/min)

Thermo-switch: 110° F (43° C) "ON", 90° F (32° C) "OFF" bi-metal type.

OPERATION

BEFORE LIGHTING

- Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.
- 2) Make sure that there are no obstructions in the air intake or venting system.
- 3) Clear the immediate area of combustible materials, gasoline, and other flammable liquids and vapours.
- 4) Make sure that the gas log is in its proper place.

THE FIRST FIRE:

During the first few hours of operation the appliance will release an odor. This is caused by the burning off of residual oils used in the manufacturing process and by the curing of the high heat paint. The ceramic glass window may require cleaning after this initial "burn in." Please read the instructions on cleaning in the MAINTENANCE section before doing so.

The optional gold plated items must be <u>absolutely clean</u> before you light each fire. The acid from your fingerprints may permanently etch the gold plating.

If the protective packaging that accompanied the gas log is still in place, follow the instructions in the LOG PLACEMENT section.

LIGHTING PROCEDURE

WARNING: If you do not follow these lighting instructions exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

Open the pedestal cover front panel to reach the control.

Make sure the gas control knob is turned to the "off" position. If it is not, press knob slightly and turn clockwise to the "off" position. **Do not force the gas control knob**. If the gas control was in the on position you should wait 5 minutes before trying to re-light the stove.

- If you smell gas STOP and follow instructions on the COVER page.
- Push in and turn gas control knob counterclockwise to the "pilot" position.
- Press gas control knob in and hold. Immediately push the red igniter button repeatedly until pilot flame ignites. Continue holding in the control knob for 5 to 10 seconds, then release it. If the pilot flame goes out, repeat this step.
- Push and turn gas control knob counterclockwise to the "on" position.

CAUTION: This insert is hot while in operation. Do not touch. Keep children, clothing and flammable materials away.

WALL THERMOSTAT

To operate your ELATION using the wall thermostat, follow the lighting procedure and set the gas control to the ON position. Simply set your wall thermostat to a comfortable temperature and the insert will do the rest.

During the heating season, you do not have to touch the gas control valve. If you would like the insert off for a while, just set the thermostat to its minimum setting. However if you do not need the insert for quite some time, follow the procedure outlined in the SHUTDOWN section. This will extinguish the pilot light as well.

SHUTDOWN

Push in and rotate the gas control knob clockwise to the "off" position. Do not force.

If you are going to perform any maintenance or cleaning, first allow the insert to cool completely. Follow the instructions in the section on cleaning under MAINTENANCE INSTRUCTIONS.

BLOWER

The blower control contains a variable speed switch and a thermal switch. When the insert is operating, the thermal switch will turn on at 110° F, allowing the blower to operate . When the insert cools to 90° F, the thermal switch turns off the blower in about 40 minutes. This prevents the blower from operating when the insert is not in use.

The blower not only helps circulate air throughout the room, it also increases the heat output and efficiency of the ELATION.

MAINTENANCE INSTRUCTIONS

TURN OFF THE GAS WITH THE SHUTDOWN VALVE AND DISCONNECT THE ELECTRICAL POWER BEFORE SERVICING THE APPLIANCE.

The venting system and the fireplace insert should be inspected at least once a year.

Remove the glass front and the logs and clean them if necessary.

The control compartment, air circulating passages, firebox, logs and burner should be cleaned at least once a year by vacuuming or brushing.

Check the pilot flame to see if it is adjusted properly. Readjust the pilot flame if necessary or clean the pilot orifice if readjustment is not possible.

Check the burner for flame lifting or for unusual flame pattern. If necessary clean the burner orifice. For more information, see "Adjustments" in the INSTALLATION section.

Keep the area clear and free from combustible materials, gasoline and other flammable vapours and liquids.

GLASS MAINTENANCE

We have supplied your ELATION with special ceramic glass which will withstand the heat from the unit without cracking. **Be careful not to hit the glass.**

NOTE:

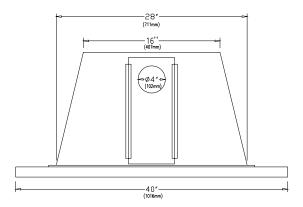
Never clean this glass with abrasive cleaners.
Use only a cleaner recommended by your dealer.
Never clean glass while it is still hot.
Do not operate the insert with the glass broken or removed

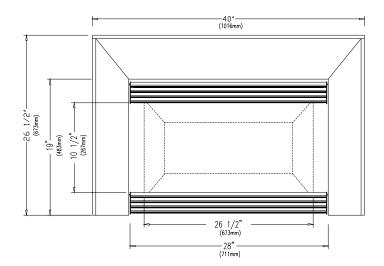
For removing your glass front see page 13.

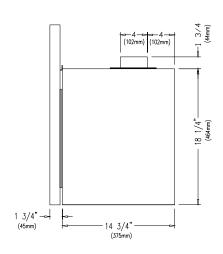
If Your Glass Breaks:

• See your dealer for exact replacement glass.

TOP, FRONT AND SIDE VIEWS







Note: Views show SMALL surround

INSTALLATION

SAFETY NOTICE

Improper installation may result in a house fire. Follow installation directions. Installation must be in accordance with local building codes or, in the absence of local codes, with current CAN/CGA B 149 installation codes for gas appliances in Canada and current National Fuel Gas Code ANSI Z223.1 in the USA.

INSTALLATION SHOULD BE DONE BY A QUALIFIED INSTALLER.

THIS FIREPLACE INSERT MUST BE VENTED OUTSIDE.

THIS FIREPLACE INSERT MUST BE ELECTRICALLY GROUNDED IN ACCORDANCE WITH LOCAL CODES OR, IN THE ABSENCE OF LOCAL CODES, WITH THE National Electrical Code, ANSI/FPA 70, or the CANADIAN ELECTRICAL CODE, CSA C22.1.

POSITIONING THE INSERT

The ELATION may be installed as an insert into an existing masonry fireplace OR as an insert into an existing listed solid fuel burning factory built fireplace.

- Provide adequate accessibility clearances for servicing and proper operation.
- Provide adequate clearances around air openings into the combustion chamber...
- This appliance has a built-in draft hood, so no additional external draft hood is required.
- If installing in a factory built fireplace, you may remove the damper, glass doors, screen, screen holder, baffles, and smoke shelf provided that what you take out can be reinstalled. Also you <u>must</u> retain the pieces you have removed, in case someone would like to use the listed solid fuel burning factory built fireplace at a later date.

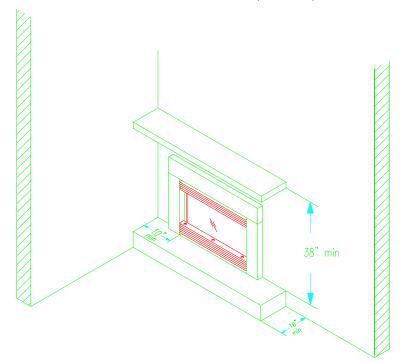
A GAS APPLIANCE MUST NOT BE CONNECTED TO A CHIMNEY FLUE SERVING A SEPARATE SOLID-FUEL BURNING APPLIANCE.

CLEARANCES

Clearance distances between the insert and any combustible material must be maintained while installing your appliance:

Clearance to NON combustible hearth is: 0

Clearance to combustible mantel: 38" (965 mm)
Clearance to combustible side wall: 10" (254 mm)
Minimum hearth extension: 16" (406 mm)

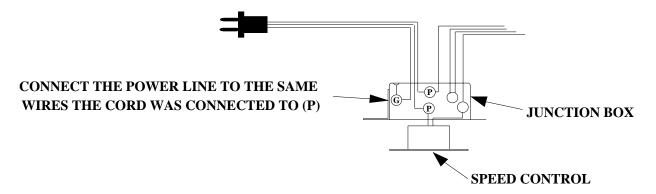


INSTALLATION OF THE UNIT

- Move the ELATION to the desired position. Mark the location for the gas inlet pipe and the location where the vent is in relation to the fireplace flue. Remove the appliance.
- Route a 3/8" minimum NPT iron pipe gas line to the desired location.
- Install a shutoff valve to the gas line. Tighten securely using a pipe joint compound.

NOTE: The valve includes two ¹/₄" tappings for test gauge connection. You may need, however, to install a 1/8" plugged tapping between the gas line and the connection point to the insert, if it is required by local codes.

- If you wish to make a direct electrical connection to the blower without using the six-foot cord supplied, route a 120 volt, 60 Hz electrical power supply line to the same location. Remove the power cord and connect the 120V line as per the following procedure:
 - Unscrew the speed control unit and pull a few inches away from the junction box
 - Unscrew the two marr connectors attached to the cord (P) and the cord ground
 - Remove the cord and route the supply line through the same holes
 - Make the electrical connection with the same wires the cord was attached to
 - Screw the ground wire to the junction box (G)
 - Screw the speed control unit back in place

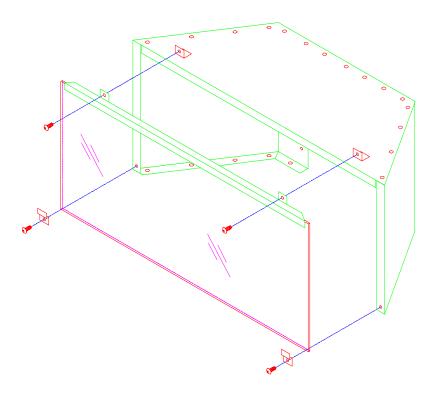


If you prefer to use the six-foot cord supplied, just connect it to a 120V outlet.

- Move the ELATION to the desired position and shim the unit to a level position.
- Connect gas line to the insert at the right side using listed connectors
- Check the gas line piping for leaks. Use a soap and water solution.

WARNING: DO NOT USE OPEN FLAME TO CHECK LEAKS.

GLASS FRONT REMOVAL, CLEANING AND INSTALLATION



Removal:

- Let the insert cool down for at least one hour.
- Open the top and bottom louvres to reveal the retaining brackets.
- Remove the two (2) screws holding the top bracket and remove the bracket still holding the glass in place.
- Lift out glass. (Do not let glass fall forward!)

CAUTION: Do not operate your insert without a glass front or with a broken glass.

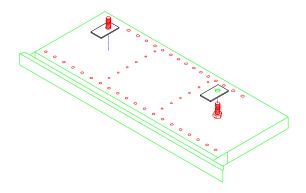
Cleaning:

- Only clean the glass when cold.
- Clean with liquid type cleaners or soap and water; do not use abrasive cleaners, which can scratch the glass.

Installation:

- Place the glass front assembly back in position. Align the top bracket with the holes for the screws.
- Install the two (2) screws.

BURNER REMOVAL AND INSTALLATION



REMOVAL:

- Remove the glass front assembly as shown on page 13.
- Remove the logs.
- Unscrew the line leading to the main orifice under burner (below floor of firebox) and then unscrew the orifice fitting from the burner.
- Lift out burner.

WARNING: NEVER OPERATE THE FIREPLACE INSERT WITHOUT HAVING THE ORIFICE PROPERLY SCREWED TO THE VENTURI TUBE. THIS COULD RESULT IN SERIOUS DAMAGE TO THE GAS INSERT AND IS A SERIOUS RISK OF FIRE.

NOTE: For an optimal performance the air shutter opening should be 1/8" opening for natural gas and 1/4" to 5/16" for propane.

EMBER KIT INSTALLATION

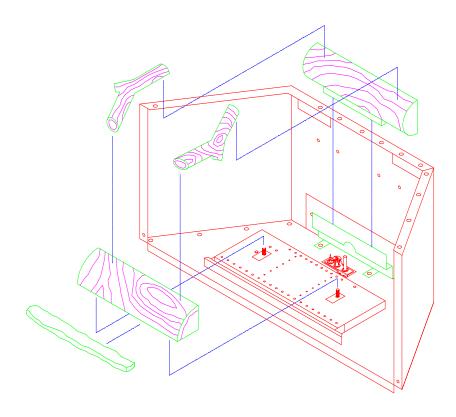
Three small plastic bags are supplied with your unit. One of the bags contains vermiculite to simulate ashes in the fire box, another contains lava rock to simulate coals and the last one is filled with rock wool fiber which, when glowing red, resembles hot embers.

- 1. Remove log grate from the insert.
- 2. Place some vermiculite and some lava rocks on the burner and in front of the burner. Never put too much of these materials near the burner holes. The gas must pass through the burner easily.

CAUTION: Blocking gas ports with vermiculite or lava rock will result in poor light-up performance and delayed ignition.

3. Place five or six pieces of rock wool fiber approximately 1" large on top of the front gas ports. Place two or three pieces over each of the back gas ports. Make sure not to put too many pieces as this could result in an altered flame pattern and possible carbon deposition.

LOG INSTALLATION



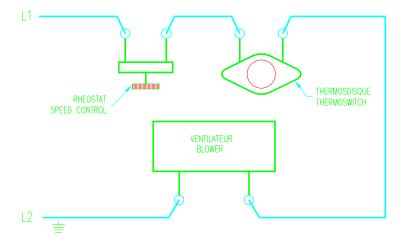
- 1. Place rear log in rear log bracket as shown above.
- 2. Place front log on burner so front log holes fit over front log pins.
- 3. Place the left hand log so it lays on the left hand edge of the front and rear logs
- 4. Place the right hand log so it lays on the right hand edge of the front and rear logs

BLOWER REPLACEMENT

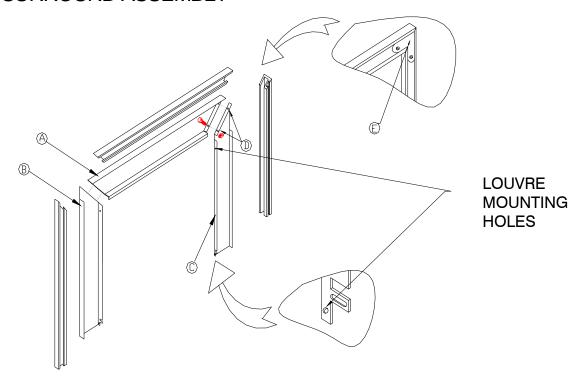
The blower is accessed through the firebox.

- 1. Unplug the blower cord or switch off circuit breaker.
- 2. Remove the glass as shown on page 13.
- 3. Remove logs and burner.
- 4. Remove the bottom of firebox by removing the 10 screws around the perimeter and the 2 in the back of the firebox.
- 5. Disconnect the two wires attached to the blower motor.
- 6. Remove the two blower retaining screws and lift out the blower.

BLOWER WIRING DIAGRAM



SURROUND ASSEMBLY



- 1. Lay parts A, B and C on a flat, non marking surface. Fasten these together with the ½ "bolts and nuts supplied (D).
- 2. Position the three trim pieces over the surround and connect the ends with corner brackets (E). Ensure the mitered corners fit evenly before tightening down. (Note: brackets "E" come in 2 parts the blank brackets go under the set screws).
- 3. Attach the louvres to the mounting holes with screws provided

ADJUSTMENTS

NOTE: Adjustments to the valve assembly must be performed by a qualified service person.

- The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ psi (3.5 kPa).
- The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less that ½ psi (3.5 kPa).

Natural Gas Pressure Settings:

The inlet supply or line pressure must be a minimum of 5" wc (1.3 kPa) and a maximum of 8" wc (2 kPa). The orifice has a #42 hole.

ELEVATION	INPUT RATING
0-4500 ft. (0-1400 m)	25,000 (7300) BTU/hr (watts)
4500 ft. (1400 m) +	25,000 (7300) BTU/hr (watts) less 4% per 1000 ft. (300 m)
	or reduce manifold pressure by 0.25" wc (0.06 kPa) per 1000 ft. (300m)

Propane Pressure Settings:

The inlet supply or line pressure must be a minimum of 11" wc (2.8 kPa) and a maximum of 14" wc (3.5 kPa). The orifice has a #53 hole.

ELEVATION	INPUT RATING
0-4500 ft. (0-1400 m)	25,000 (7300) BTU/hr (watts)
4500 ft. (1400 m) +	25,000 (7300) BTU/hr (watts) less 4% per 1000 ft. (300m)
	or reduce manifold pressure by 1" wc (0.25 kPa) per 1000 ft. (300m)

NOTE: THE INPUT RATING SHOULD ALWAYS BE CHECKED WHEN FIRST RUNNING THIS APPLIANCE. To do this, reduce the background flow rate, time the meter, light the fireplace and take another reading. Check with your gas supplier for the gas BTU content at your elevation. Input is the rate of flow multiplied by the heating value of the gas (cubic feet/hour x BTU per cubic feet). Adjust the manifold pressure so that the unit does not operate above the rated input.

ADJUSTING THE GAS PRESSURE

NOTE: If cover plate is already installed, remove it by removing the two screws with a Phillips screw driver.

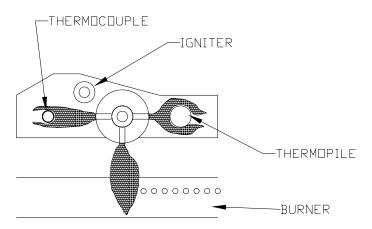
NOTE: The maximum manifold pressure is set at the factory at 3.5" WC for natural gas and 10" WC for propane. To adjust the maximum manifold pressure for altitude, you must remove the manifold pressure adjustment cover. The variable gas control knob must then be removed using a special screwdriver. Rotate and reinstall the knob so that the maximum pressure reading is correct.

Locate the two pressure test taps. Check line pressure or manifold pressure by loosening the small screw inside the tap with a flat-head screwdriver about one turn. Connect pressure gauge using a 1/4" I. D. rubber hose.

Ensure the line pressure falls within the allowable limits and adjust the manifold pressure according to the elevation table.

The pilot should have a strong blue flame which engulfs the thermopile and the thermocouple. If there is any yellow in the pilot flame tips, the gas flow must be reduced by adjusting the pilot pressure adjustment screw.

PILOT ASSEMBLY:



Remember to replace all covers !!!!

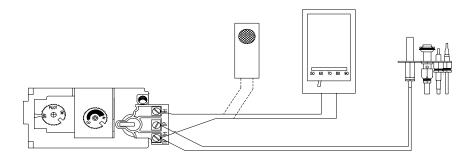
ADJUSTING AIR SHUTTER

To adjust the air shutter there is an adjustment band below the firebox floor. The factory setting for the air shutter is 1/8" for natural gas, 1/4" for propane. After operating the appliance for half an hour or so the flames should have turned a nice yellow colour. However, in higher altitudes you may find a smudging up of the glass after a few days. The shutter should then be adjusted open in 1/16" increments until the glass stays clear. If the flame does not turn yellow the air shutter should be closed until the flame just turns yellow. To access the shutter you need to remove the front surround with the louvres. The shutter adjustment band is directly in the center under the firebox.

WALL THERMOSTAT

The optional wall thermostat will automatically keep your room at an even temperature. You need to choose a convenient location for the thermostat. Remember that it should be at least 10 feet from the insert and away from direct radiation of the fire. Run the correct gauge wire (see table) from the valve to the thermostat and wire as shown in the diagram.

Maximum length of thermostat wire		
18 Ga	20 ft (6 m)	
16 Ga	30 ft (9 m)	
14 Ga	50 ft (15 m)	
12 Ga	75 ft (23 m)	



Gas Valve Remote Control Wall Thermostat Thermopile (optional)

• Conversion kit to natural gas

OPTIONS

	DESCRIPTION	CODE
•	Wall thermostat kit	E5558
•	Ultrasonic remote control	E5568
•	Conversion kit to propane gas	

REPLACEMENT PARTS

No.	DESCRIPTION	. CODE
1	PILOT ASSEMBLY	. 49103 (NATURAL GAS)
		. 49106 (PROPANE)
2	BLOWER	. 44070
3	GAS VALVE	. 49133 (NATURAL GAS)
		. 49126 (PROPANE)
4	PIEZO	. 49128
5	THERMO-DISC	. 44044
6	Burner	. ELZCI-02
7	LOG SET (4)	. EL0001
8	GLOWING EMBERS	. 2-A7923
9	FRONT GLASS	. EMB209
10	RHEOSTAT	. 44080
11	BURNER ORIFICE	. 44054 (NATURAL GAS)
		. 44053 (PROPANE)
12	THERMOCOUPLE	. 49122

LIMITED 5 YEAR WARRANTY

DROLET STOVES AND FIREPLACES INC. hereby warrants the quality of its ELATION Vented Fireplace insert against manufacturing defects. The product shall be delivered to the buyer in good condition and the latter should inform the vendor immediately of any defect in the product delivered.

During the first year of the limited warranty, DROLET STOVES AND FIREPLACES INC. will provide free replacement parts for the fireplace insert except for the glass assembly. DROLET STOVES AND FIREPLACES INC. will cover labour-related costs deemed reasonable by the company. All other costs related to dismantling the structure, decoration, venting system, etc. are the responsibility of the fireplace insert owner.

During the second to the fifth year of the limited warranty, DROLET STOVES AND FIREPLACES INC. will replace defective parts free of charge except the VALVE, IGNITION CONTROL, BURNER ASSEMBLY, LOGS, GLASS ASSEMBLY, REFRACTORY, BLOWER and BLOWER CONTROL. DROLET STOVES AND FIREPLACES INC. will not compensate for labour costs related to parts replacement.

The warranty is conditional upon proper installation in accordance with the manufacturer's instructions.

All repairs must be approved by an official representative of the company before being undertaken.

The delivery costs of all replacement parts provided by DROLET STOVES AND FIREPLACES INC. are the responsibility of the client.

This warranty may not be transferred to a second person and becomes effective on the date the product is purchased.

The warranty may not be extended in any way by our representatives, dealers or any other intervening party.

No other claim of any nature whatsoever shall be considered by the vendor or manufacturer.

DROLET STOVES AND FIREPLACES INC. 1700 Leon-Harmel Quebec, QC G1N 4R9 Canada